

**Figure 1:** ASCL1 sequence (regulatory region and exon1) derived from Refseq NM\_004316 9hg19). The coding sequence is in upper case and underlined is the CpG rich region.

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**Figure 2:** LHX8 sequence (regulatory region and exon1) derived from Refseq NM\_001001933 (hg19). The coding sequence is in upper case and underlined is the CpG rich region.

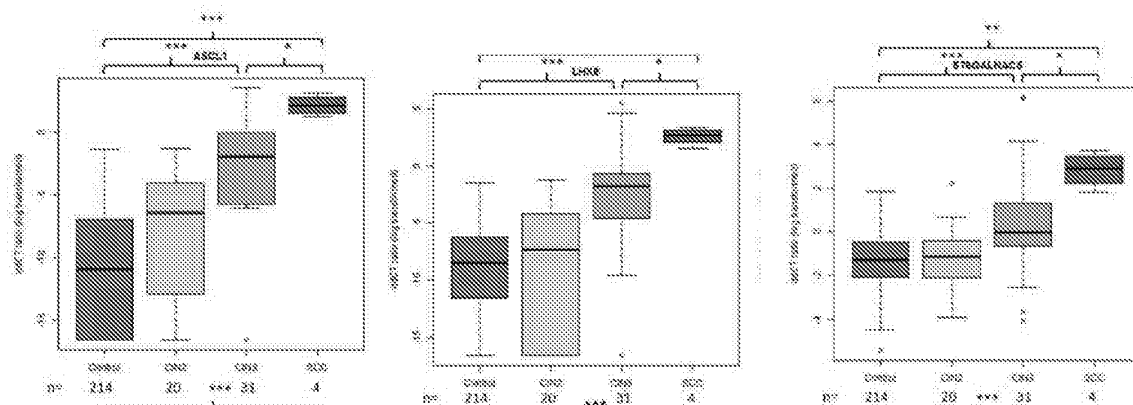
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**Figure 3:** ST6GALNAC5 sequence (regulatory region, exon1, intron 1 and exon 2) derived from Refseq NM\_030965 (hg19). The coding sequence is in upper case and underlined is the CpG rich region.

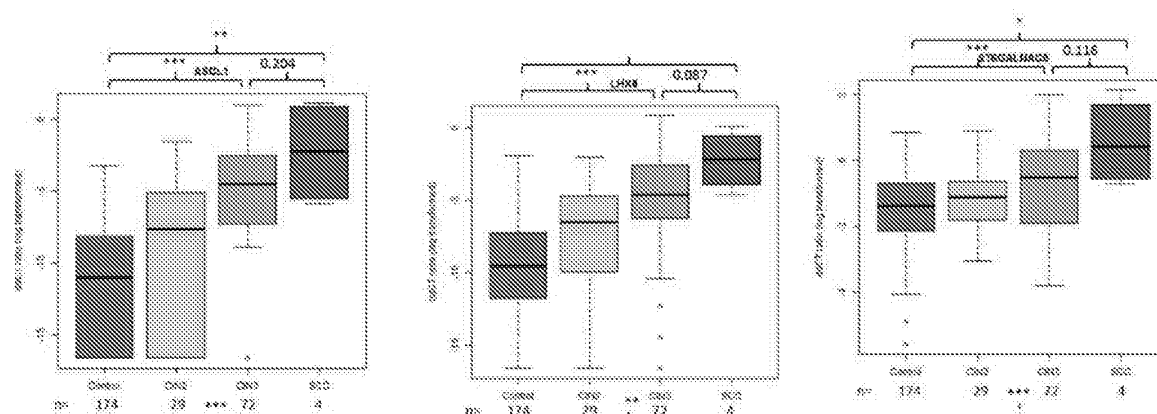
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AGCCGGCGGGCGGAGAGCAGCACCCAGCAGCGCCCCGGGGTCCCCGCGGGA
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```

Figure 4

## A. hrHPV-positive lavage self-samples



## B. hrHPV-positive brush self-samples



## C.

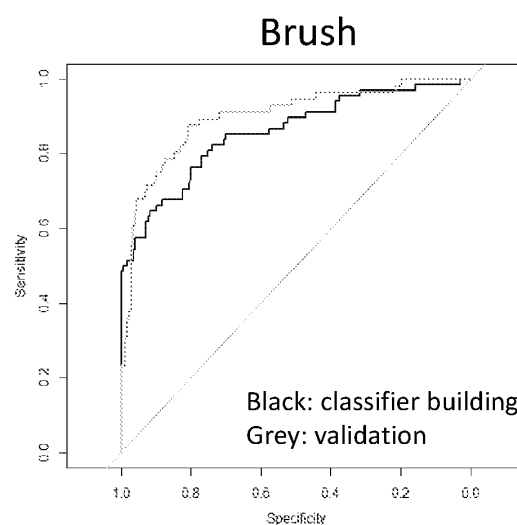
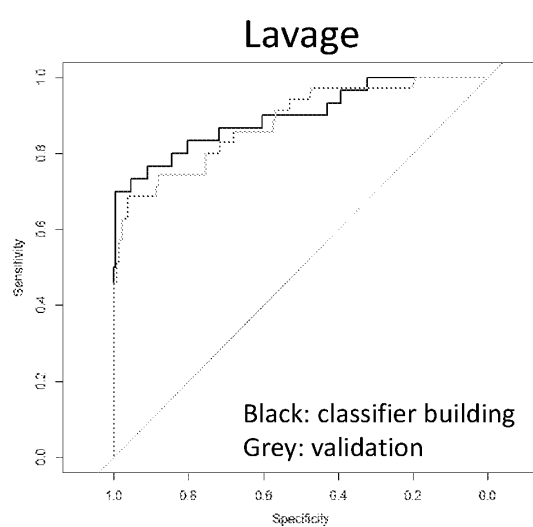
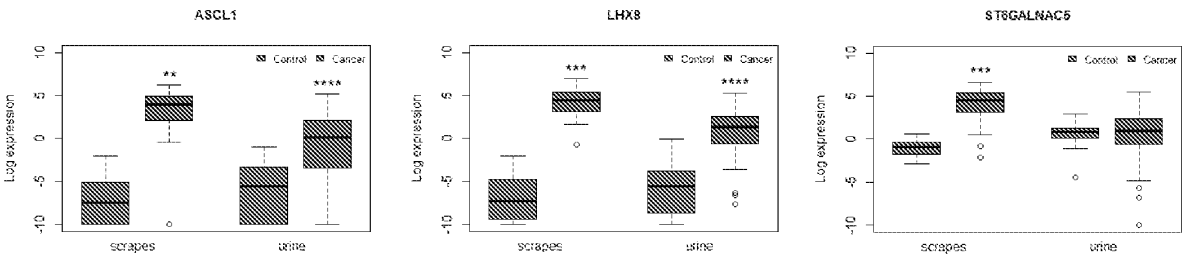
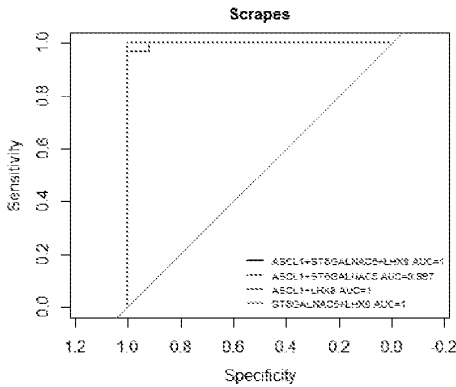


Figure 5

A. qMSP results in scrapes and urine



B. Receiver Operating Characteristics (ROC) curves in HPV+ scrapes



C. Receiver Operating Characteristics (ROC) curves in urine

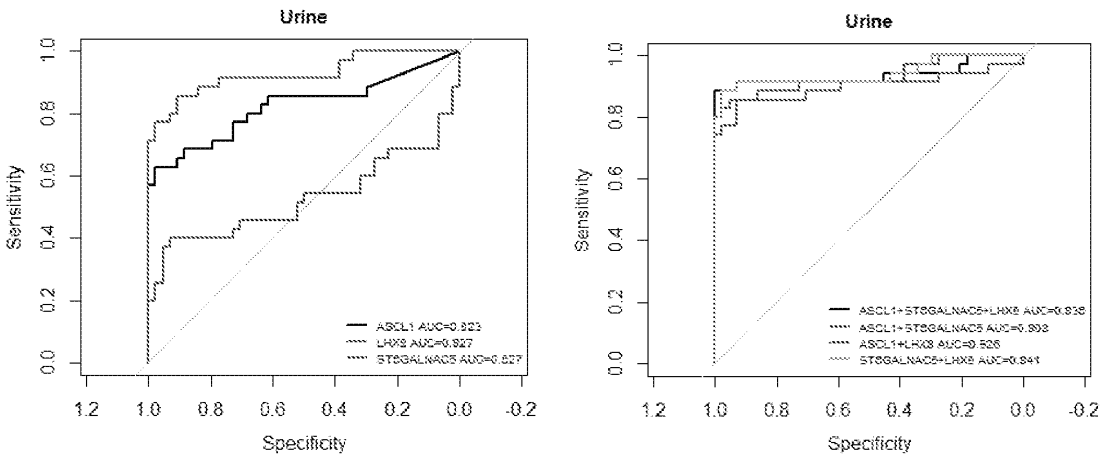


Figure 6  
qMSP results in cervical scrapes of patients with endometrial cancer

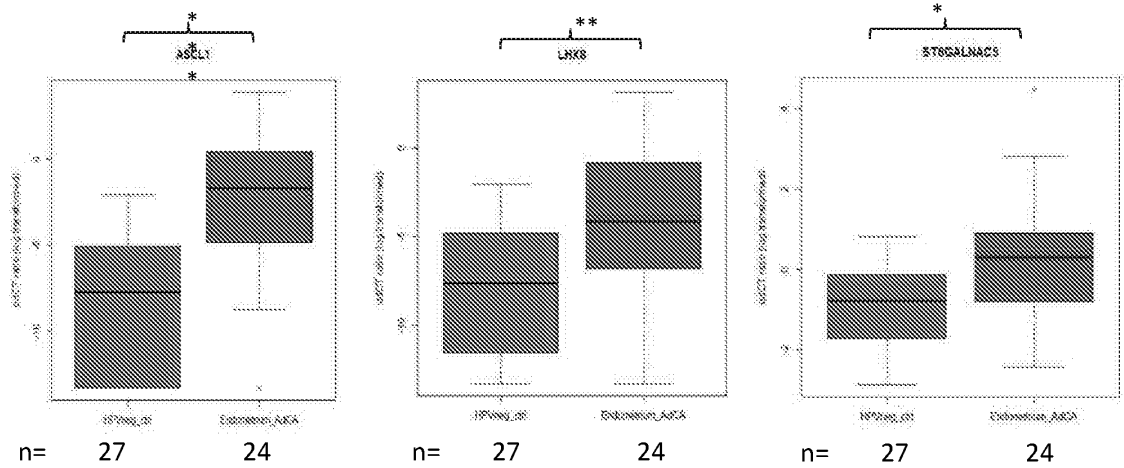


**Figure 7:** ZNF-582 sequence (regulatory region and exon1) derived from Refseq NM\_144690 (hg19). The coding sequence is in upper case and underlined is the CpG rich region.

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**Figure 9**  
qMSP results in vulvar specimens

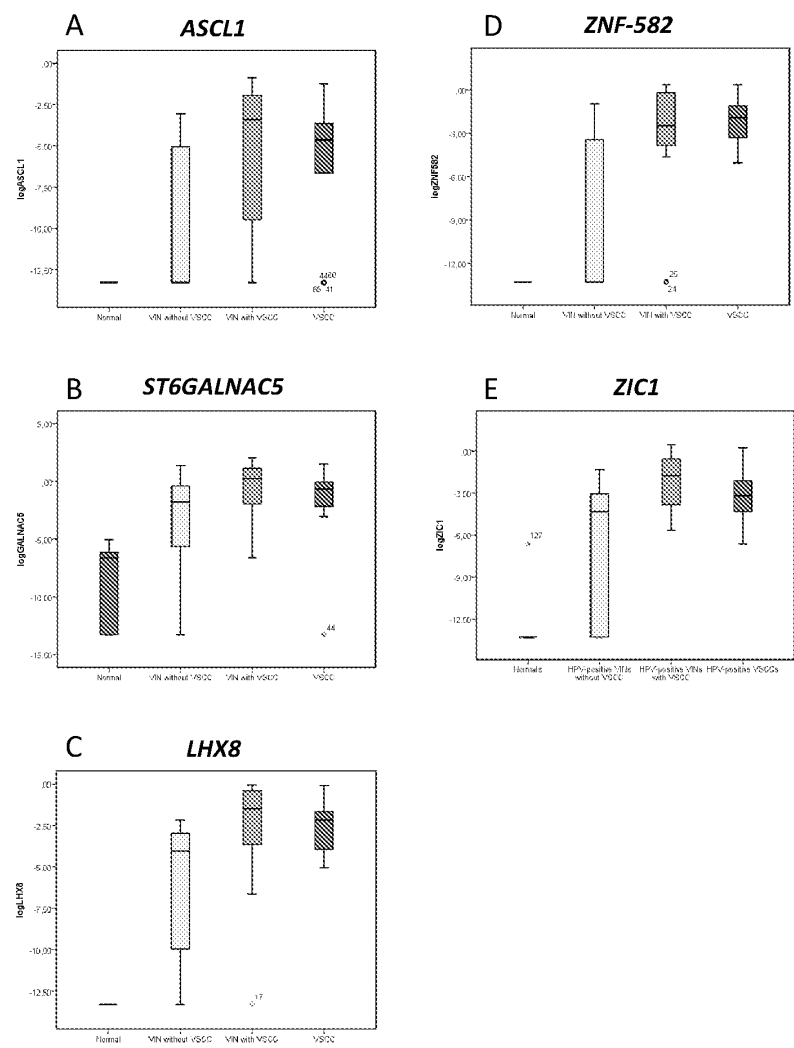


**Figure 10**

qMSP results in anal specimens

